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The Thirty-Ninth Annual Report

OF THE

UNIVERSITY OF MARYLAND

Agricultural Experiment Station



College Park, Prince Georges County, Maryland

1925-1926

PUBLISHED BY THE STATION

CONTENTS

	Pages
Thirty-ninth Annual Report.....	iii
Publications	iii
Agricultural investigations.....	v
Changes in Station staff.....	xi
Buildings and land requirement.....	xii
Land	xii
Financial Statement.....	xiv-xvi
Bulletin No. 274. A Simple and Effective System of Management for the Control of Bacillary White Diarrhea.....	1
Bulletin No. 275. Cropping Tests with Tobacco.....	21
Bulletin No. 276. A Study of Respiration in Potatoes with Spec- ial Reference to Storage and Transportation.....	49
Bulletin No. 277. Soybeans.....	73
Bulletin No. 278. The Budding and Grafting of Fruit Trees....	103
Bulletin No. 279. The Maryland State Egg-Laying Competition and Performance Tests II.....	149
Bulletin No. 280. Roadside Markets in Maryland.....	165
Bulletin No. 281. Variety Tests of Field Crops at Ridgely.....	203
Bulletin No. 282. Disastrous Effect of Mosaic on the McCormick Potato	215

UNIVERSITY OF MARYLAND

AGRICULTURAL EXPERIMENT STATION

Volume 39

1925-1926

THE THIRTY-NINTH ANNUAL REPORT OF THE MARYLAND AGRICULTURAL EXPERIMENT STATION

For the fiscal year ending June 30, 1926.

By H. J. PATTERSON, Director.

*To the Governor of Maryland and the President and Board of Regents
of the University of Maryland:*

Gentlemen: In conformance with the Act of Congress passed in 1887 providing for the establishment and support of Agricultural Experiment Stations and the supplementary acts thereto passed in 1906 and 1925, I submit, herewith, a report upon the investigational work which is being pursued, a statement as to some of the needs in order to meet present and future demands and developments, together with a financial statement as to the expenditure of the Federal and State appropriations for the year ended June 30, 1926.

PUBLICATIONS.

The results secured during the year have been given to the public through addresses at meetings, articles in the newspapers, papers published in agricultural and scientific journals, and bulletins published by this Station.

The information given through bulletins represents only a part of the help given to farmers. Farmers know that they can get accurate and unprejudiced information from the Experiment Station and consequently they write for help on individual problems. This necessitates the writing of many hundreds of personal letters each year.

The following is a list of the bulletins issued during this fiscal year:

	Pages
No. 274. A Simple and Effective System of Management for the Control of Bacillary White Diarrhea.....	1-20
By Roy H. Waite.	
No. 275. Cropping Tests with Tobacco.....	21-48
By D. E. Brown and W. M. Lum.	
No. 276. A Study of Respiration in Potatoes with Special Reference to Storage and Transportation.....	49-72
By William Duke Kimbrough.	

No. 277. Soybeans	73-102
By J. E. Metzger, M. G. Holmes and Harlow Bierman.	
No. 278. The Budding and Grafting of Fruit Trees.....	103-148
By A. Lee Schrader and W. E. Whitehouse.	
No. 279. The Maryland State Egg-Laying Competition and Performance Tests II.....	149-160
By Roy H. Waite and F. H. Leuschner.	
No. 280. Roadside Markets in Maryland	161-202
By S. H. DeVault and G. E. Bouis.	
No. 281. Variety Tests of Field Crops at Ridgely.....	203-214
By J. E. Metzger and Albert White.	
No. 282. Disastrous Effect of Mosaic on the McCormick Potato....	215-220
By R. A. Jehle.	
Annual Report for 1924-25.....	1-20
By H. J. Patterson.	

The following is a partial list of the scientific papers contributed by members of the staff during the year:

- Appleman, C. O. and E. V. Miller. A chemical and physiological study of maturity in potatoes. Jour. Agr. Research. Vol. 33, 1926.
- Auchter, E. C. Experimental results in pruning apple trees. Proc. Peninsula Hort. Soc. 1925.
- An experiment in propagating apple trees on their own roots. Proc. Amer. Soc. Hort. Sci. 22: 205-211. 1925.
- New developments in pruning peach trees. Proc. Md. Agr. Soc. 1925 and Amer. Fruit Grower. 1925.
- Effect of time and method of planting, and amount of top and root pruning on the growth of the orchard the first year. Proc. Peninsula Hort. Soc. 1926. Proc. Mass. Hort. Soc. 1926.
- Maintaining production in the apple orchard. Proc. Mass. Hort. Soc. 1926.
- The physiology of apple tree growth; Orchard diagnosis and prescription. Proc. Va. Hort. Soc. 1926.
- Auchter, E. C. et al. Effect of shade on growth, fruit bud formation and chemical composition of apple trees. Proc. Amer. Soc. Hort. Sci. 23. 1926.
- Auchter, E. C. and Schrader, A. L. Cross-fertilization of the Arkansas apple. Proc. Amer. Soc. Hort. Sci. 22: 96-105. 1925.
- Bierman, Harlow. The effect of over-run dipping losses in ice cream, July 1925. Ice Cream Review, also in Ice Cream Trade Journal.
- The effect of temperature on dipping losses in ice cream, July 1, 1925. Ice Cream Review, also in Ice Cream Trade Journal.
- Boswell, V. R. A study of some environmental factors influencing the shooting to seed of wintered-over cabbage. Proc. Amer. Soc. Hort. Sci. 22: 380-393. 1925.
- Effect of temperature on the growth and yield of garden peas. Proc. Amer. Soc. Hort. Sci. 23. 1926.
- Conrad, C. M. Biochemical study of insoluble pectic substances in vegetables. Am. Jour. Botany. Vol. 13. 1926.
- DeVault, S. H. Farm taxation in Maryland.
- The marketing of eggs in Baltimore.
- Marketing of livestock in Baltimore.
- Marketing of wheat in Baltimore.
- Marketing perishable products in Baltimore.
- Ferguson A. H. and Emack, E. P. Working libraries of our seed laboratories. Proceeding A. O. S. A. of N. A. 1925.
- Geise, F. W. Influence of nitrogen, phosphorus, and potash separately and in combination on sweet potato production. Proc. Amer. Soc. Hort. Sci. 22: 363-370. 1925.
- Harley, C. P. Normal variation in the chemical composition of fruit spurs. Proc. Amer. Soc. Hort. Sci. 22: 134-146. 1925.

- Holmes, F. S. Some variation among results of germination tests. A. O. S. A. of N. A. 1925.
- Amounts of seed for purity analyses. Seed World.
- Johnston, E. S. Comparative study of the "Six Types" of nutrient solutions in relation to the growth of potato plants in sand cultures. Soil Science, Vol. 20. 1925.
- A plant photometer—plant physiology. Vol. 1. 1926.
- Kelk, O. M. and Mostyn, R. M. Some notes on calculating and reporting results of referee work. Proceedings A. O. S. A. of N. A. 1925.
- Kemp, W. B. The reliability of a difference between two averages. Amer. Soc. Agron. Vol. 16. 1925.
- Norton, J. B. S. 7000 dahlias in cultivation. 291 pp. University Press. Published by the author.
- 1925 dahlia ratings. 20 pp. University Press. Published by the author. 1925.
- Euphorbiaceae in flora of Utah and Nevada. Contr. U. S. Nat. Herb. 25: 341-346. 1925.
- Some interesting work on tomato seed breeding and selection. Seed World, 17: 13. 1925.
- 1926 dahlia ratings. 31 pp. Hyattsville. 1926. Published by the author.
- Norton, J. B. S. and Ezekiel, W. N. The name of the American brown-rot sclerotinia (abst.) phytopath. 14: 31-32. 1924.
- Norton, J. B. S. and Safford, W. E. Horticultural varieties of dahlia in standardized plant names. 109-120. 1923.
- Norton, J. B. S. and White, T. H. Report of the Southern Trial Garden. I. c. Jan., 1923, 1924, 1925, 1926, 1927.
- Schrader, A. L. Revival of the grape industry. Proc. Md. Agr. Soc. 1925.
- Schrader, A. L. and Auchter, E. C. The first years effect of different fertilizers on apple trees low in vigor. Proc. Amer. Soc. Hort. Sci. 22: 150-161. 1925.
- White, T. H. Effect of heavy vs. light pruning on greenhouse roses. Proc. Amer. Soc. Hort. Sci. 23. 1926.
- Whitehouse, W. E. and Auchter, E. C. Cross pollination studies with Delicious apples. Proc. Amer. Soc. Hort. Sci. 1926.

AGRICULTURAL INVESTIGATIONS.

The Station aims to investigate and discover information which will help the farmers of Maryland to successfully meet and overcome problems and difficulties so as to place farming on a substantial and profitable basis. The work in hand covers most all phases of creative, productive and protective agriculture. Many surveys and inventories are made which concern rural economic and social conditions. These surveys aim to acquire facts which will point the way for a more prosperous and contented farm population.

As a rule emphasis is put on matters that might be considered as ministering to the sick.

In so far as possible investigations are organized around the industry rather than by departments. This means that the various departments are informed as to what other departments are doing with a given crop and they cooperate so that projects supplement one another to a considerable extent.

Many of the experiments are conducted at the points in the State where conditions are most favorable for the work and where the results will be obtained under representative farm conditions.

This gives many farmers, directly interested in a project, an opportunity to see the tests from time to time. Improved practices will come quicker by seeing than by hearing or reading.

The Station has 159 active projects in progress. Many of these investigations have been in progress for a number of years. It requires time to get accurate and dependable results. Very few tests can be completed in a single year. They are classified as follows:

Agricultural Economics:

1. Economics of the Canning Industry in Maryland:

- A. Cost of production of tomatoes, sweet corn and peas.
- B. Cost of manufacture of tomatoes, sweet corn and peas.
- C. Cost of distribution of tomatoes, sweet corn and peas.
- D. Historical study of farm prices in Maryland. (In cooperation with Agronomy and U. S. A. D.)

Agronomy:

1. Corn:

- A. Variety tests for mature corn and silage.
- B. Corn breeding by selection.
- C. Hybridization.

2. Wheat:

- A. Variety tests.
- B. Hybridization.
- C. Head selection and head-to-row tests.
- D. Environmental factors affecting wheat yields.

3. Oats:

- A. Variety tests.
- B. Variety tests winter oats.

4. Barley:

- A. Hybridization for smooth awns on winter barley.

5. Hay, Forage and Pasture:

- A. Tests of seed from different sources.
- B. Green manure and soiling crops—rye, vetch, sweet clover.
- C. The botany and culture of bent grasses.
- D. Rates of seeding hay mixtures.
- E. Durability of pasture grasses.

6. Annual Legumes:

- A. Inoculation for legumes.
- B. Grasses for hay and pasture.
- C. Variety tests of soybean.
- D. Soybean hay making and composition of soybeans.
- E. Effect of soybeans on wheat yields.

7. Sugar Corn:

- A. Breeding, growing and curing for seed.
- B. Seed production and breeding.

8. Miscellaneous projects:

- A. Crop rotation.
- B. The effect of genetic equilibrium and selection upon plant breeding practice.
- C. Lawn grass experiments.

Animal Husbandry:

1. Comparison of fish meal and soybean oil meal as nitrogenous supplements for brood sows.
2. Experiment in hogging-down of rye.
3. Data obtainable concerning the rates of gain made by pure-bred and by cross-bred pigs.

Animal Husbandry--Continued

4. Study of quality of Maryland hams.
5. Comparative study of wether and ram lambs to determine the effect of castration upon the rate and character of production.

Biological Laboratory and Hog Cholera Investigations:

1. Determining the percentage of double treated hogs that may later become susceptible to cholera; to find the proper age that pigs may be immunized by the double treatment; and length of time immunity of double treated pigs may be expected to last.
2. Determining the age at which pigs from immune others become susceptible to hog cholera.
3. A study of the relation of Ozone to animal diseases.
4. Survey of abortion in dairy cattle.

Botany Plant Propagation:

1. *Vegetative plant propagation:*
 - A. Temperature requirements.
 - B. Sand vs. other media for cuttings.
 - C. Moisture requirements.
 - D. Seasonal effects.
 - E. The necessity for leaves on green wood cuttings.
 - F. Structures from which roots develop.
 - G. Chemicals for stimulating root growth on cuttings.
 - H. Survey of types of root growth in different plants with the hope of finding something to help understand the underlying principles.

Canning:

1. Studies of the yielding capacity and the canning qualities of different varieties of tomatoes, spinach, beans and beets.

Dairy Husbandry:

1. Establish a system or method whereby contagious abortion may be regulated and controlled.
2. A study of the cost of milk production.
3. Study of the history and development of station herd.
4. Effect of the consistency of the ice cream mix at time of drawing from freezer upon the smoothness of ice cream after hardening.
5. Studying the value of adding vanilla flavoring to chocolate ice cream.

Entomology:

1. The Boxwood Leaf Miner.
2. The Biology and Control of Deperons Leaf Miners.
The Chrysanthemum Gall Midge.
3. The biology and control of some greenhouse pests.
4. Winter protection of bees.
5. The properties of pine tar creosote as an insecticide.
6. A study of the efficiency of spreaders and stickers.
7. The comparison of the effectiveness of chemically pure and commercial carbon bi-sulphide.
8. The effect of oil emulsion on scale insects and aphid eggs.
9. Further studies on the control of the Oriental peach moth.
10. Methods for the control of the Potato Tuber Moth.
11. Corn ear worm life history and control.

Floriculture:

1. *Carnations:*
 - A. A study of calyx splitting.
 - B. Effect of soil types on yields of varieties.
2. *Snape dragon:*
 - A. Breeding and selection.
3. *Gladiolus:*
 - A. Effect of time of ripening of bulb on forcing qualities.

Floriculture—Continued4. *Treatment of greenhouse soil in solid beds:*

A. Drainage.

B. Freezing.

C. Drying.

5. Greenhouse crop fertilizers.

6. Dahlia variety testing.

Plant Pathology (Disease) Investigations:

1. Inspection of orchards and nurseries.

2. Annual plant disease survey.

3. Diseases of carnations.

4. Botanical survey of Maryland.

5. Identification of samples of plants.

6. Fruit rot-sclerotinia.

7. Weed identification and eradication.

8. Varieties resistant to disease.

9. Maryland native grasses.

10. Maryland trees, botany of.

11. Resistance to clover diseases.

12. Tomato leaf spot and other tomato diseases.

13. Wilt resistance of tomatoes.

14. Carnation stem rot.

15. Cabbage disease resistance.

16. Root rot of peas. resistance.

17. *Mycosphaerella*.

18. Corn root rot.

19. Peach twig canker.

20. Dahlia diseases.

21. Dahlia trial garden.

22. Dusting truck crops for disease.

23. Wheat scab, etc.

24. Tomato mosaic.

25. Tobacco diseases.

26. Blight resistant spinach.

27. Apple scab.

28. Potato seed and mosaic control.

29. Bean anthracnose control.

30. Spraying and dusting. (Cooperation).

31. Effect of chemicals on pollen on heredity.

Plant Physiology:1. *The rest period in potato tubers:*

A. Field test on shortening the rest period of Irish Cobbler potatoes by treating the seed with Ethylene Chlorhydrin.

2. *A chemical and physiological study of the "Spindling Sprout" Diseases of Potatoes:*3. *Physiological and biological aspects of vegetable storage:*

A. Physiological and chemical basis for the initial rise in respiration of potatoes after a period of cold storage.

B. Comparison of physiological shrinkage of different varieties of potatoes in storage.

C. Relation of pectic transformation to softening of potatoes in late storage.

D. Physiological and chemical studies on parsnips, beets, turnips, carrots, cantaloupes and tomatoes under different storage conditions. Special emphasis is being placed on respiration in relation to quality and period of storage.

4. *Regeneration in potato tubers:*

A. Law and mechanism of inhibition and correlation in growth of sprouts on potato tubers.

B. Controlling influence of soil atmosphere on sprouting and growth of potatoes

Plant Physiology—Continued

5. *Metabolism studies in sweet corn:*
 - A. Polysaccharide changes in sweet corn during maturity with special reference to dextrins.
6. *Physiological aspects of fruit storage:*
7. *A study of the pectic constituents in tomatoes with reference to quality of the canned product:*

Pomology:

1. Fruit spur and biennial bearing studies of apples—Hancock, Md.
2. The effect of shade on horticultural plants. Fruits, vegetables and flowers used—College Park.
3. The effect of varying the length of day on plant growth and chemical composition—College Park.
4. The fertilization of apple orchards—Salisbury, Hancock, Colesville, Berlin and Mt. Airy.
5. The fertilization of peach orchards—Salisbury, Berlin, Mt. Airy and College Park.
6. Sod versus tillage for apple orchards—Hancock and Colesville.
7. The propagation of apple trees on their own roots—College Park.
8. The fertilization of strawberries—College Park, Ridgely, Salisbury and Marion.
9. The effect of bud and spur defoliation on fruit bud formation (peach)—College Park.
10. The influence of pollination on fruit yields—Hancock, College Park and Salisbury.
11. Experiments in grape training and pruning—College Park, Beltsville and Salisbury.
12. The rejuvenation of peach orchards—College Park and Smithsburg.
13. Peach pruning experiments—College Park, Salisbury and Mt. Airy.
14. The breeding of early colored grapes—College Park.
15. Variety tests of apples, peaches, pears, plums and cherries—College Park.
16. Variety tests of grapes and strawberries—College Park and Ridgely.
17. Variety tests of bush fruits—College Park.
18. Transplanting studies with trees.
19. Collection of phenological data.
20. Apple breeding and testing of new seedlings.

Poultry Husbandry:

1. *Egg Laying Competition*—Some of the problems being studied in connection with this project are:
 - A. Relation of body weight to production.
 - B. Difference in feed consumption exhibited by the different strains.
 - C. Studies in problems of management especially in relation to controlling disease.
2. *Tests of a special method for drying and pulverizing poultry manure as it comes from the dropping boards:*
3. Designing and testing poultry house appliances.

Ridgely Sub-Station:

1. Growing multiplication plats of mammoth red wheat for distribution.
2. The use of fertilizers in the rotation of corn, wheat, hay and tomatoes.
3. Tests with late potatoes—varieties, size of seed and fertility.
4. Variety and fertilizer tests of strawberries.
5. Experiments with sweet potatoes, eggplants, peppers and cantaloupes.
6. Experiments with garden peas for canning and market.
7. Tests of varieties of tomatoes and early plants on total yield.
8. The effect of lime with and without fertilizers and manure.
9. Tests of different kinds of lime on alfalfa.
10. Variety tests of corn, wheat and soybeans.
11. Tests of new selections of wheat.

Seed Laboratory:

1. Inspection of seeds sold throughout the State each year.
2. The use of fertilizers in the rotation of corn, wheat, hay and tomatoes.
3. Examination of samples submitted to the laboratory each year.
4. Identification of seeds submitted to the laboratory from time to time.
5. Studies of observed variations among germination tests.
6. Studies of changes in weight of various components of seed samples and the resulting effects on the percentage composition.

Soil and Fertility:

1. Resurvey of soils of certain counties.
2. Analysis of important soil types.
3. Field study of the fertilizer requirements of the important soil types.
4. The lime requirement of Maryland soils. (In cooperation with County Agents.)
5. Movement of lime in the soil.
6. A study of the rate of early potato fertilizers on Norfolk soil.
7. Effect of fertilizer treatments upon the quality of tomatoes. (In cooperation with horticulture.)
8. Effect of fertilizer treatments upon the lime requirement.
9. Plant nutrition studies in sand cultures.
10. Field study of concentrated fertilizer mixtures. (In cooperation with U. S. D. A.)
11. The effect of soybeans upon the succeeding crop.
12. A study of the organic-inorganic nitrogen ratio for early potato fertilizer.
13. Field tests of high analyses fertilizers. (In cooperation with U. S. D. A.)
14. Field tests of different carriers of nitrogen. (In cooperation with U. S. D. A.)
15. Effect of growing plants upon the reaction of the nutrient solution.

Tobacco Investigations:

1. Tobacco breeding and variety tests.
2. Crop rotation tests with tobacco.
3. Effects of crops on yields of succeeding crops in the rotation, with special reference to tobacco.
4. Fertilizer tests and studies in the nutrition requirements of the tobacco plant, with reference to both quality and yield of leaf tobacco.
5. Improved methods of handling seed beds, including steam sterilization.

Vegetable Gardening:

1. *Potatoes:*
 - A. Variety experiments with especial relation to a good late variety.
 - B. Time of planting late potatoes—Belair, Marion and College Park.
2. *Cabbage and Cauliflower:*
 - A. Methods of growing seed of especially adapted varieties.
 - B. Conditions affecting heading of late crop of cauliflower in southern section of State—Ridgely and College Park.
 - C. Study of hardiness of Early Jersey Wakefield and Charleston Wakefield, and possible bearing it may have on formation of seed shoots—College Park.
 - D. Selection of mid-season "yellows" resistant strains best suited to Maryland—College Park.
3. *Garden Peas:*
 - A. Fertilizers.
 - B. Rate of seeding.
 - C. Best crop to precede.
 - D. Rotation of crops with and without legumes as affecting diseases.
 - E. Inoculation experiments.
 - F. Influence of temperature on the growth of pea—Ridgely and College Park.
 - G. Factors influencing yield and quality of canning peas.

Vegetable Gardening—Continued

4. *Rhubarb*:
 - A. Chemical fertilizers with especial reference to sulphate of ammonia—College Park and Chillum.
5. *Cantaloupes*:
 - A. Breeding and selection.
 - B. Manures vs. fertilizers.
 - C. Pollination influence.
6. *Sweet Potatoes*:
 - A. Fertilizers—best nitrogen and potash carriers.
 - B. Lime influence—Salisbury and Cheltenham.
7. *General Fertility Problems*:
 - A. Amounts of manures and fertilizers to keep soil fertile for vegetable production.
 - B. Effect of continued applications of potash salts.
 - C. Effects of rye as a winter cover for early spring plowing and same for later work.
8. *Testing new varieties and strains of vegetables*:
9. *A study of Maryland vegetables as to varieties, cultural methods and marketing*:
10. *Asparagus*:
 - A. Effects of potash on yield and quality.
 - B. Comparison of spring and summer application of commercial fertilizers.
11. *Spinach*:
 - A. The development of blight resistant strain.
 - B. Varieties suitable for market and canning.
12. *Tomatoes*:
 - A. Breeding, selection of varieties for canning.
 - B. Cultural methods.
13. *Canning*:
 - A. Yielding capacity and qualities of different varieties of beans.
 - B. Yielding capacity and qualities of different varieties of beets.

CHANGES IN STATION STAFF—1925-26.

The following changes in the Experiment Station Staff occurred during this fiscal year:

Resignations.

J. A. Gamble.....	Dairy Husbandry.
A. M. Smith.....	Associate Soils.
F. H. Leuschner..	Associate Poultryman.
W. N. Ezekiel.....	Assistant Plant Pathology.
R. F. Hale.....	Assistant Agronomy.
F. J. Doan.....	Assistant Dairy.
W. R. Crawford..	Assistant Animal Pathology.
E. L. Browne.....	Assistant Agricultural Economics.

Appointments.

S. H. DeVault.....	Agricultural Economics.
W. J. Hart.....	Assistant Agricultural Economics.
Paul Walker.....	Assistant Agricultural Economics.
Margaret Coffin....	Home Economics.
G. Eppley.....	Assistant Agronomy.
R. C. Munkwitz.....	Assistant Dairy.
Paul Z. Peltier.....	Assistant Entomology.
A. J. Moyer.....	Assistant Plant Pathology.
C. L. Smith.....	Assistant Plant Physiology.
Geo. D. Quigley..	Assistant Poultry Husbandry.

BUILDINGS AND LAND REQUIREMENTS.

Most of the departments of the Experiment Station and the College of Agriculture could use more space to advantage. At the present time some of the departments are scattered in several buildings. This condition militates against efficiency and economy.

Most of the members of the Station Staff and the College faculty believe that the first and principal effort of every one should be centered on securing a new building to house the general administrative offices; the College of Arts and Sciences; and the College of Education. Such a new building with existing buildings would probably enable all the departments (not agriculture) temporarily quartered in the Agricultural building to move. The Agricultural building would then provide satisfactorily for the immediate requirements for offices, laboratories, class rooms, etc., for all of the Agricultural departments of the University. The College of Agriculture is much in need of a small office for each worker. This would increase efficiency and be helpful to both teacher and students.

The full development of the work of the Departments of Horticulture, Forestry, Bacteriology, Animal Pathology and the Biological Sciences will soon require special buildings. These buildings should be provided just as soon as conditions and circumstances would warrant.

LAND.

The farm land owned by the University has been reduced by taking off for building, campus, athletic field, etc., until the area available for general crops and investigation purposes is only about 100 acres.

Much more land could be used to advantage. The Animal Husbandry departments should have about 500 acres and other departments could profitably use 500 acres, or a total of 1000 acres. More land should be obtained at once if the work of the College of Agriculture is to be developed and made as efficient as is desired by all interests.

Each year that arrangements for procuring land is deferred it will become more difficult to get what is wanted, as there will be fewer places available and prices are likely to be higher.

It would seem impracticable and unwise at this time to press for funds for buying land, but some desirable places could probably be secured on long-time leases with the option to purchase at any time within the limits of the lease. The rent to be paid would in most cases represent less than the interest on the purchase price. This plan would give the University an opportunity to develop its work gradually and not involve so great an expenditure or invest-

ment at the start. It would also enable some of the plans and the suitability of the places to be tested before any money was tied up in the properties.

The location of the farms, of course, should be as near the central plant as possible, but it is more important that the places should be selected with reference to the character of the land and its adaptability to the work to be undertaken rather than that it should be contiguous to the present farm.

The land on the adjoining farms all lack uniformity and is not at all suitable for investigational work. Most of it is of low productive capacity and would require many years and much expense to put in condition to grow satisfactory crops. Much of it is held at prices far above what its agricultural productive capacity would warrant.

Considering these facts it would seem best to procure land located on a State highway where it is easily and always accessible and where the work in progress can be seen and advertised to the thousands of people who travel that road.

Animals and products can easily be transported from farms on the pike to the laboratories for class purposes, or classes can easily be taken to the farms when desired. Farms on a State road are accessible every day in the year, whereas farms located but short distances on dirt by-roads might not be comfortably reached for many days at a time during the winter and spring months.

FINANCIAL STATEMENT.**MARYLAND AGRICULTURAL EXPERIMENT STATION IN ACCOUNT
WITH UNITED STATES APPROPRIATIONS.**

Dr.	Hatch Fund	Adams Fund	Purnell Fund
To appropriations for fiscal year 1925-1926. Cr.	\$15,000.00	\$15,000.00	\$20,000.00
By Salaries	\$14,355.24	\$13,905.01	\$12,553.39
Labor	610.69	.....	1,380.00
Stationery and Office Supplies.....	.....	..	264.43
Scientific Supplies	8.75	121.16	345.70
Sundry Supplies ....	.....	96.63	206.23
Communication Service ..	.....	6.84	.....
Travel Expense .....	.....	38.94	1,791.21
Transportation of things.....	.....	.....	2.95
Publications .....	.....	.....	11.20
Furniture and Fixtures .....	.....	58.13	954.41
Library .....	.....	.....	12.52
Scientific Equipment	25.32	765.37	395.18
Live Stock .....	.....	.....	88.00
Tools, Machinery and Appliances .....	.....	7.92	638.34
Buildings and Land .....	.....	.....	1,356.44
Contingent Expenses ...	.....	.....	.....
Totals ...	\$15,000.00	\$15,000.00	\$20,000.00

**MARYLAND AGRICULTURAL EXPERIMENT STATION
STATION FARM ACCOUNT.**

Dr.	
Balance July 1, 1925.....	\$ 399.68
Receipts from sales 1925-1926.....	17,339.33
	17,739.01
Cr.	
By Salaries	2,328.34
Labor	8,476.34
Stationery and Office Supplies.....	25.00
Feeding Stuffs	1,732.92
Sundry Supplies	907.00
Fertilizers	495.95
Communication .....	.64
Travel Expense	508.56
Transportation of things	45.40
Heat, Light, Water and Power.....	242.11
Furniture and Fixtures	1.50
Library	9.26
Scientific Equipment	42.90
Live Stock	755.35
Tools, Machinery and Appliances.....	145.48
Buildings and Land.....	198.45
Contingent Expenses	62.51
Transfer of balance in Fellowship Funds to separate account.....	513.47
Balance June 30, 1926.....	1,247.83
	\$17,739.01

MARYLAND AGRICULTURAL EXPERIMENT STATION IN
ACCOUNT WITH THE STATE APPROPRIATIONS.

Dr.	General Fund	Ridgely Farm
Balance July 1, 1925.....	.....	\$ 268.80
Receipts for the year 1925-1926.....	\$74,444.88	5,776.54
	<u>74,444.88</u>	<u>6,045.34</u>
Cr.		
By Salaries	27,471.82	1,800.00
Labor.....	15,481.06	2,136.99
Stationery and Office Supplies.....	849.46	.....
Scientific Supplies ..	666.54	.....
Feeding Stuffs	4,845.81	3.25
Sundry Supplies ..	2,254.67	362.24
Fertilizers	3,446.90	576.68
Communication Service ..	378.77	36.79
Travel Expense ..	1,647.47	391.76
Transportation of things	1,071.54	31.89
Publications	2,651.03	.....
Heat, Light, Water and Power	2,649.95	17.10
Furniture and Fixtures.....	513.45	4.90
Library ..	757.67	.....
Scientific Equipment	38.06	.....
Live Stock	1,575.00	.....
Tools, Machinery and Appliances..	1,560.76	140.18
Building and Land	2,674.56	366.81
Rent of Equipment for Egg Laying Contest	2,000.00	.....
Premiums on Insurance	1,264.50	76.10
Contingent Expense .....	.....	.50
Overdraft July 1, 1925.....	6,645.68*	.....
	<u>\$89,444.70</u>	<u>\$ 5,945.19</u>
Overdraft June 30, 1926.....	5,999.82	.....
Cr. balance June 30, 1926.....	.....	100.15
	<u>\$74,444.88</u>	<u>\$ 6,045.34</u>

*Due from State Treasurer.

MARYLAND AGRICULTURAL EXPERIMENT STATION IN ACCOUNT
WITH REGULATORY AND PUBLIC SERVICE FUNDS.

Dr.	Biological Laboratory	Seed Inspection
Balance July 1, 1925.....	\$ 40.80	.....
Receipts for year 1925-1926.. ..	10,562.18	\$ 8,517.18
	<u>\$10,602.98</u>	<u>\$ 8,517.18</u>
Cr.		
By Salaries	7,024.97	6,628.33
Labor	1,260.00	58.00
Stationery and Office Supplies.....	261.78	250.58
Sundry Supplies	685.75	30.14
Scientific Supplies.. ..	1,084.49	64.72
Feeding Stuffs	44.67	.....
Communication Service	395.81	42.67
Traveling Expenses	67.12	413.53
Transportation of things.....	31.18	.....
Heat, Light, Water and Power.. ..	686.84	70.15
Furniture and Fixtures	48.00	515.86
Library .....	.....	59.30
Scientific Equipment .....	.....	66.80
Live Stock	29.50	.. ..
Tools, Machinery and Appliances.....	8.75	93.14
Building Repairs .....	.....	71.43
Contingent Expenses	76.22	5.00
Overdraft July 1, 1925 .....	.....	784.47
	<u>\$11,705.08</u>	<u>\$ 9,154.12</u>
Overdraft June 30, 1926.....	*1,102.10	†636.94
	<u>\$10,602.98</u>	<u>\$ 8,517.18</u>

*Due from State Treasurer, \$715.61.

†Due from State Treasurer, \$636.94.

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